UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ERIC J. HORVITZ and GREGORY P. BARIBAULT

Appeal 2007-0209
Application 10/021,621
Technology Center 2100

Decided: March 14, 2007

Before JAMES D. THOMAS, KENNETH W. HAIRSTON, and JEAN R. HOMERE, *Administrative Patent Judges*.

HOMERE, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal from the Examiner's final rejection of claims 1 through 85 pursuant to 35 U.S.C. § 134. We have jurisdiction under 35 U.S.C. § 6(b) to decide this appeal.

The Examiner rejects the pending claims as follows:

A. Claims 23-26 and 34-39 are unpatentable under 35 U.S.C. §102(b) over Robert M. Losee, Jr. (Minimizing Information Overload: The Ranking of Electronic Messages).

B. Claims 1-10 and 40 are unpatentable under 35 U.S.C. §103(a) over Smith, *et al.*, (US 6,463, 462 B1) in view of Badt *et al.*, (US 6,542,868 B1), Anderlind *et al.* , (US 6,781,972 B1), Wright *et al.*, (US 6,078,568 A), and Cooper *et al.*, (US 6,757,362 A).

C. Claims 1 and 11 are unpatentable under 35 U.S.C. §103(a) over Smith, *et al.*, (US 6,463,462 B1) in view of Badt *et al.* (US 6,542,868 B1) and Matthew Marx (CLUES: Dynamic Personalized Message Filtering), hereinafter referred as Marx.

D. Claims 1, 12, 13 and 19-22 are unpatentable under 35 U.S.C.§103(a) over Smith, *et al.*, (US 6,463, 462 B1) in view of Badt *et al.*, (US 6,542,868 B1), Eggleston *et al.* (US 6,101,531 A), and Wright *et al.*, (US 6,078,568 A).

E. Claims 1 and 14 are unpatentable under 35 U.S.C. §103(a) over Smith *et al.*, (US 6,463, 462 B1) in view of Badt *et al.*, (US 6,542,868 B1), and Jonathan Isaac Helfman *et al.* (Ishmail: Immediate Identification of Important Information).

F. Claims 1 and 15-18 are unpatentable under 35 U.S.C. §103(a) over Smith *et al.*, (US 6,463, 462 B1) in view of Badt *et al.*, (US 6,542,868 B1), and Jonathan Isaac Abu-Hakima (US 6,499,021 B1)

G. Claims 27-33 are unpatentable under 35 U.S.C. §103(a) over Robert M. Losee, Jr. (Minimizing Information Overload: The Ranking of Electronic Messages) as applied to claim 23 above, and further in view of Eggleston *et al.* (US 6,101,531 A).

H. Claims 41-54 are unpatentable under 35 U.S.C. §103(a) over Juha Takkinen (CAFÉ: A Conceptual Model for Managing Information in Electronic Mail) in view of Badt *et al.*, (;US 6,542,868 B1) and Jonathan Isaac Abu-Hakima (US 6,499,021 B1).

I. Claims 55-85 are unpatentable under 35 U.S.C. §103(a) over Jonathan Isaac Abu-Hakima (US 6,499,021 B1) in view of Bady *et al.*, (US 6,542,868 B1), Wright *et al.*, (US 6,078,568 A), and Eggleston, *et al.* (US 6,101,531 A).

The Examiner relies on the following references:

Wright	US 6,078,568 A	Jun. 20, 2000
Eggleston	US 6101531 A	Aug. 8, 2000
Smith	US 6463462 B1	Oct. 8, 2002
Abu-Hakima	US 6499021 B1	Dec. 24, 2002
Badt	US 6542868 B1	Apr. 1, 2003
Cooper	US 6757362 A	Jun. 29, 2004
Anderlind	US 6781972 B1	Aug. 24, 2004

Helfman, "Ishmail: Immediate Identification of Important Information," (1995).

Marx, "CLUES: Dynamic Personalized Message Filtering," 113-121 (1996).

Losee, "Minimizing Information Overload: The Ranking of Electronic Messages." *Journal of Information Sciences* 15, 179-189, (1989).

Independent claims 1 and 23 are illustrative and representative of the Appellants' invention. They read as follows:

1. A user interface to manage electronic messages, comprising:

a display providing one or more display objects associated with delivery of one or more messages, the messages being automatically classified according to a respective priority value; and

one or more inputs associated with the display objects to facilitate adaptation of the user interface to one or more preferences of a user, the one or more inputs includes at least one or more user preferences for assigning a priority value to a voice message based at least in part on acoustical properties of the voice message.

23. A method associated with message delivery, comprising:

generating a priority associated with a message;

determining an expected loss of non-review of the message at a current time based at least on the message priority and an expected rate of lost opportunity for the user resulting from non-review of the message as a function of time;

determining an expected cost of outputting the message at the current time; and

alerting a user of the message in response to determining that the expected loss is greater than the expected cost.

Appellants contend that Losee does not anticipate claims 23 through 26 and 34 through 39. Particularly, Appellants contend that Losee does not fairly teach or suggest determining an expected rate of lost opportunity to the user as a function of time, as recited in representative claim 23. (Br. 6, Reply Br. 6). Appellants also contend for the same reasons that Losee, taken in combination with Eggleston, does not render claims 27 through 33 unpatentable under 35 U.S.C. § 103 (a). Further, Appellants contend that Smith and Badt in various combinations with Aderlind, Marx, Eggleston, Helfman, Abu Hakima, Wright and Cooper do not render claims 1 through 22 unpatentable under 35 U.S.C. § 103 (a). Particularly, Appellants argue that the proposed combinations do not fairly teach or suggest assigning a priority value to a voice message based at least in part on acoustical

properties of the voice message, as recited in representative claim 1. (Br. 8, Reply Br. 9). Additionally, Appellants contend for the same reasons that Badt in various combinations with Takkinen, Abu-Hakima, Wright and Eggleston, does not render claims 41 through 85 unpatentable under 35 U.S.C. § 103 (a). (Br. 11, 12, Reply Br. 13).

The Examiner, in contrast, contends that Losee teaches comparing the expected cost of not-reviewing a message with the cost of reviewing the message to determine whether it is cost-effective for the user to review the message. (Answer 4 and 34). Therefore, the Examiner concludes that Losee anticipates the invention as recited in representative claim 23. (*Id.*) For the same reasons, the Examiner concludes that it would have been obvious to one of ordinary skill to combine Losee with Eggleston to yield the invention, as recited in dependent claims 27 through 33. (Answer 21). Further, the Examiner contends that Badt teaches analyzing a voice mail to identify the speaker and to prioritize the voice message accordingly. (Answer 8, 36). Therefore, the Examiner concludes that it would have been obvious to one of ordinary skill in the art to combine the teachings of Smith and Badt with Aderlind, Marx, Eggleston, Helfman, Abu Hakima, Wright and Cooper to yield the claimed invention, as recited in representative claim 1. (*Id.*, 10, 12, 15, 18, 20). Similarly, the Examiner contends that it would have been obvious to combine the teachings of Badt with those of Takkinen, Abu-Hakima, Wright and Eggleston to yield the invention as recited in claims 41 through 85. (Answer 24, 27, 29).

We affirm.

ISSUES

The *pivotal* issues on appeal before us are as follows:

(1) Under 35 U.S.C. § 102 (b), does Losee's disclosure anticipate the claimed invention when Losee teaches comparing the cost of not reviewing a message with cost of reviewing the message to determine which course of action is more cost-effective to the user?

(2) Under 35 U.S.C. § 103 (a), would one of ordinary skill in the art at the time of the present invention have found that Badt's disclosure in combination with other references that the Examiner relies upon to render the claimed invention unpatentable when Badt teaches analyzing a voice message to determine a speaker's identity to prioritize the voice message accordingly?

FINDINGS OF FACT

At the outset, we note that the Examiner's factual findings throughout the Answer regarding the specific teachings of Smith, Aderlind, Marx, Eggleston, Helfman, Cooper, Takkinen, Abu-Hakima, and Wright are not in dispute. Similarly, the majority of Examiner's findings with respect to Losee and Badt are not in dispute except as outlined in the preceding paragraphs. Accordingly, we are adopting the Examiner's factual findings regarding the cited references as they pertain to the undisputed claim limitations.

Appellants invented a method and system for displaying and classifying messages in a user interface according to the user selected priority values. (Specification 10, figure 1). Particularly, the user designates certain preferences according to which their received messages should be prioritized. Such preferences or priority values can be based on the

acoustical properties of a received voice message. (Specification 11). Additionally, Appellants' invention determines the cost of reviewing a message as well as the loss of opportunity resulting from not reviewing the message to alert the user when it is cost-effective to review the message. (Specification 40). More particularly, the invention expresses the cost of not reviewing the message as an expected rate of lost opportunity per unit of time to the user resulting from not reviewing the message. (*Id.*)

Losee discloses a method of ranking electronic messages by economic worth to minimize information overload.[1] (Abstract 179). Particularly, Losee discloses an economic model that determines and compares the cost of examining a message with the cost of not examining the message. If the cost of examining the message exceeds the cost of not doing so, the user is advised not to examine the message (181) to prevent information overload, which might result in an economic and opportunistic loss to the user. (179).

Badt discloses an audio notification management system that analyzes a voice message to determine the identity of the speaker, as well as the speaker's level within an organization. Badt further discloses assigning a priority value to the message based on the speaker level in the organization. Therefore, the higher the speaker's level in the organization the greater the priority value that will be assigned to the message (col. 4, ll. 30-63).

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1 Losee at page 179 defines information overload as the receipt of more information than is needed or desired to function effectively and further the goals of an individual or organization.

PRINCIPLES OF LAW

1. ANTICIPATION

It is axiomatic that anticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim. *See In re King*, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986) and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458, 221 USPQ 481, 485 (Fed. Cir. 1984).

In rejecting claims under 35 U.S.C. § 102, a single prior art reference that discloses, either expressly or inherently, each limitation of a claim invalidates that claim by anticipation. *Perricone v. Medicis Pharmaceutical Corp.*, 432 F.3d 1368, 1375-76, 77 USPQ2d 1321, 1325-26 (Fed. Cir. 2005), citing *Minn. Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1565, 24 USPQ2d 1321, 1326 (Fed. Cir. 1992). Anticipation of a patent claim requires a finding that the claim at issue "reads on" a prior art reference. *Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1346, 51 USPQ2d 1943, 1945 (Fed Cir. 1999) ("In other words, if granting patent protection on the disputed claim would allow the patentee to exclude the public from practicing the prior art, then that claim is anticipated, regardless of whether it also covers subject matter not in the prior art.") (internal citations omitted).

2. OBVIOUSNESS (Prima Facie)

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). *See*

also In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). The Examiner can satisfy this burden by showing that some objective teaching in the prior art or knowledge generally available to one of ordinary skill in the art suggests the claimed subject matter. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the Appellants. *Oetiker*, 977 F.2d at 1445, 24 USPQ2d at 1444. *See also Piasecki,* 745 F.2d at 1472, 223 USPQ at 788. Thus, the Examiner must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the Examiner's conclusion.

ANALYSIS

As set forth above, representative claim 23 requires the expected rate of lost opportunity to the user resulting from not reviewing the message to be expressed *as a function of time*. Similarly, Losee teaches that the cost to a user for reviewing a message can be expressed in terms of an economic loss ensuing from information overload when that cost exceeds the cost of not reviewing the message. This information overload translates into the additional time that the user must spend reviewing the extraneous information in the message. This additional time lost by the user in turn translates into a time period during which the user could have pursued other opportunities. Hence, we find that Losee implicitly teaches that the time not spent by the user to review the extraneous information translates into an opportunity for the user as a function of time. Therefore, after considering

the entire record before us, we conclude that Appellants have not established that the Examiner erred in finding Losee's teachings anticipate claim 23. For the same reasons, we conclude that the Examiner did not err in finding that Losee's teachings anticipate dependent claims 23 through 26 and 34 through 39. Additionally, for the same reasons, we conclude that the Examiner did not err in finding that the combination of Losee and Eggleston renders dependent claims 27 through 33 unpatentable.

Next, we address independent claims 1, 40, 41, 55 and 78. Representative claim 1 requires assigning a priority value to a voice message based upon its acoustical properties. Similarly, Badt teaches assigning a priority level to a voice message based on the speaker's level within the organization. We recognize that Badt does not specifically detail that the acoustical properties of the voice message must be examined. However, one of ordinary skill in the art would have readily recognized that in order to identify the speaker, the acoustical properties of the message must necessarily be first examined. After considering the entire record before us, we conclude that Appellants have not established that the Examiner erred in rejecting representative claims 1 through 22 as being unpatentable over Smith and Badt in various combinations with Aderlind, Marx, Eggleston, Helfman, Abu Hakima, Wright, and Cooper. We also conclude for the same reasons that Appellants have not established that the Examiner erred in rejecting dependent claims 41 through 85 as being unpatentable over the teachings of Badt with those of Takkinen, Abu-Hakima, Wright, and Eggleston.[2]

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2 Appellants have not presented any substantive arguments directed separately to the patentability of the dependent claims. In the absence of a

CONCLUSION OF LAW

On the record before us, Losee's disclosure anticipates the claimed invention under 35 U.S.C. § 102(b) when Losee teaches comparing the cost of reviewing a message with the loss of opportunity resulting from not reviewing the message to determine which course of action is more cost-effective to the user. Further, one of ordinary skill in the art at the time of the present invention, would have found that Badt's disclosure in combination with other references that the Examiner relies upon to render the claimed invention unpatentable under 35 U.S.C. § 103(a) when Badt teaches analyzing a voice message to determine a speaker's identity to prioritize the voice message accordingly.

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separate argument with respect to the dependent claims, those claims stand or fall with the representative independent claim. *See In re Young,* 927 F.2d 588, 590, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991). *See also* 37 C.F.R. § 41.37(c)(1)(vii)(2004).

DECISION

We affirm the Examiner's decision to reject claims 23 through 26 and 34 through 39 under 35 U.S.C. § 102 (b). We also affirm the Examiner's decision to reject claims 1 through 22, 27 through 33 and 40 through 85 under 35 U.S.C. § 103 (a).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

JRH

ELD

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